POLREP #1
S. Bennett Avenue Mercury Spill Site
6714 S. Bennett Avenue
Chicago, Cook County, IL 60649
ATTN: <<WHO>> and RRC
EVENT: Emergency Response

I. SITUATION (as of Tuesday, 2 January 2001)

A. On 29 December 2000, the EPA Regional Response Center was informed of a Mercury Spill in the basement of a private residence located at 1671 S. Bennett Avenue. This case was referred to EPA from the state of Illinois. The original release was reportedly caused when a plumber was removing an after-market heating regulator. Initially, the resident was informed by a local utility company that the substance was not Mercury.

B. Initially, Fred Bartram and Keith Lesniak (EPA Region 5) were dispatched to perform ambient air monitoring readings which revealed mercury vapor levels significantly in excess of the 1,000 nanogram/m3 action level. Levels were in excess of 23,000 nanograms/m3 near the source of the spill. Additionally, the house has young children and a pregnant woman in residence.

C. The residents left the home to live with in-laws until the spill was remediated and vapor levels were under the health guidelines of 1,000 nanograms/m3.

D. OSC Walter Neid activated the ERRS contractor (Superior Special Services, Inc.dispatched) and Roy F. Weston START to assist with the emergency clean-up.

E. PERSONNEL ON-SITE: EPA - 2, START - 1, ERRS - 4 to 6

F. WEATHER: Cold (highs of 20°F with 6-8 inches of snow during Friday and Saturday.

II. ACTIONS TAKEN

A. At the direction of the OSC, the ERRS contractor utilized a mercury vacuum to recover an estimated 4 ounces of elemental mercury which was spilled in a basement storeroom when the regulator was removed. Following vacuuming activities, the floor was cleaned with a HgX solution several times then sealed with an epoxy-based sealer. A negative pressure blower was used to prevent the migration of vapors throughout the residence.

B. EPA Environmental Scientist (Keith Lesniak) and Weston START (Greg Janiec) performed periodic air monitoring throughout the home using both a Lumex and Jerome mercury meters. Levels were monitored throughout the removal to determine the effectiveness of the clean-up activities.

C. All clothes in the adjacent laundry room were bagged and had headspace screening performed. All materials and clothes with a headspace over the action level of 10,000 nanograms/m3 were staged for disposal in one cubic yard shipping containers by the ERRS contractor.

D. By Sunday 31 December, all ambient air levels within the house were well below the 1,000 nanogram level. During 31 December and 1 January, the venting continued to limit the migration of any lingering mercury vapors and prevent odors from the floor sealer from entering the main living spaces of the residence. Since the levels were below 1,000 throughout the house, the OSC allowed the residents to return and occupy the main floors of the residence.

E. Final clearance air monitoring with the Lumex was conducted on 2 January 2001 by EPA and START after venting operations were discontinued.

III. FUTURE ACTIONS

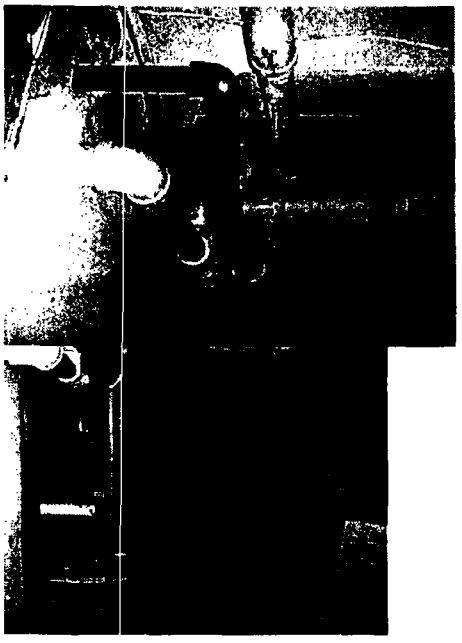
A. The residents will have blood samples taken to detect any mercury levels. The data will be released to the City Health department and ATSDR in Atlanta for evaluation.

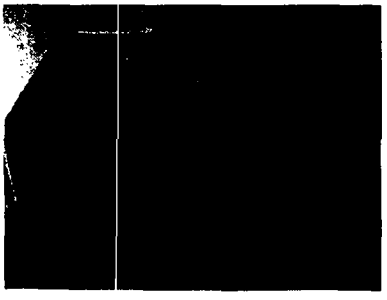
B. All containerized mercury and contaminated articles and clothing will be sent for disposal at a permitted facility for encapsualtion disposal pending facility disposal approval and the issuance of a site generator ID number.

C. START to conduct air sampling of the residence the week of 5 January 2001 for final evaluation by the local Health Dept.and ATSDR.

D. The OSC would like to commend the ERRS and START contractors, and Keith Lesniak for their commitment, efficiency and professionalism in completing the emergency removal activities despite a significant snow storm and difficult driving conditions while working through a holiday weekend.

IV. PHOTOGRAPHIC DOCUMENTATION



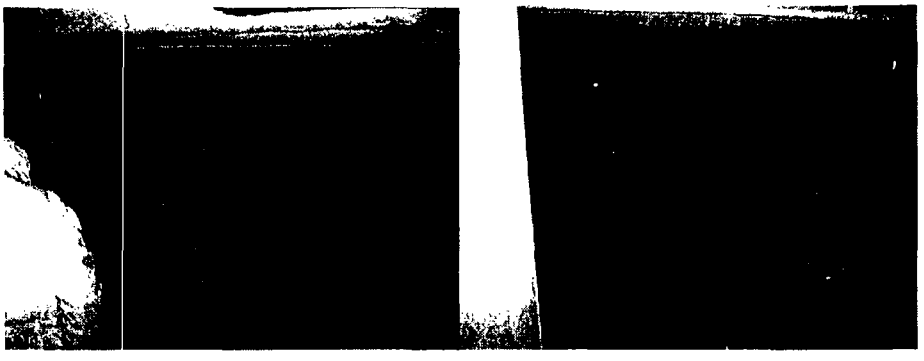


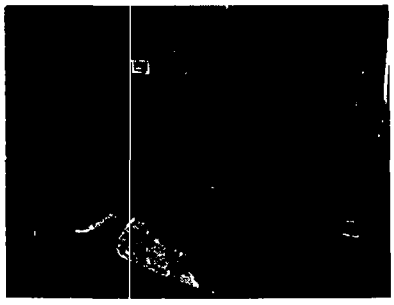
View of piping where the regulator was removed from.

View of Storage Room where spill occurred.

Close-up of mercury beads on floor in Storage Room.

Sump area which was heavily contaminated.





ERRS contractors isolating source area prior to mercury collection.

View of mercury collection vacuum and negative pressure ducting.

Staging of potentially contaminated headspace articles.

ERRS bagging clothes for testing.

Source area after mercury clean-up using
and flocr sealing.

EPA performing air monitoring Lumex.

Walter Nied, OSC
U.S. EPA REGION 5
Chicago, IL